

DEPARTMENT OF CONSERVATION

Managing California's Working Lands

DIVISION OF OIL, GAS, & GEOTHERMAL RESOURCES



July 15, 2015

Mr. Michael Montgomery United States Environmental Protection Agency – Region IX 75 Hawthorne Street San Francisco, CA 94105-3901

Dear Mr. Montgomery:

We are continuing to forge through our review of the status of active injection wells, receive operator information concerning aquifer exemption proposals, and work on several other agreed tasks necessary to update California's Class II underground injection program.

As part of this ongoing effort, we agreed to submit the following to you by today: (1) a preliminary assessment of whether data currently supplied to us demonstrates that each of the aquifers historically treated as exempt presently meets the criteria for an aquifer exemption; (2) a plan and timeframe for addressing the closure of those injection wells for which there is insufficient evidence that the zone of injection meets the criteria for an aquifer exemption; (3) a detailed plan for Class II program improvements; and (4) an outline of our intended course of action for obtaining public comment on our aquifer exemption communications.

Each of these items is addressed, in turn, below. We conclude with updates on a variety of related items.

1. Preliminary Assessment of 11 Aquifers Historically Treated As Exempt

Attachment 1 to this letter is the Division's *Preliminary Assessment of Eleven Aquifers Historically Treated As Exempt*. It discusses, by field and formation, the following information for each aquifer: (1) the number and location of injection wells; (2) the concentration, in milligrams per liter, of total dissolved solids (TDS) that is representative for each aquifer; (3) the TDS of the injected fluids for each aquifer; (4) the depth of injection historically; and (5) volumes injected since 1983, in barrels.

One of the eleven aquifers, the undifferentiated aquifer in Wild Goose Field, may have TDS in excess of 10,000 mg/L. If so, it would not be considered a USDW and thus would require no evaluation at this juncture. As for the remaining aquifers, the Division's preliminary assessment is that most or all may not meet the criteria for an

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aquifer exemption. Currently available information indicates that, aside from the undifferentiated aquifer in Wild Goose Field, the aquifers contain between 400 and 3,325 mg/L total dissolved solids, and are found at depths as shallow as 200 feet and not deeper than 3,000 feet. However, there are residual water quality questions to be resolved concerning these aquifers that may support exemptions, and we are continuing to work with operators to resolve data gaps.

Five of the eleven aquifers appear to have no wells actively injecting. The Division believes it is unlikely that any operator will endeavor to collect and present new information regarding those aquifers. The Division will likely conclude its evaluation of those aquifers sooner than it will for the aquifers in which injection is occurring. We will continue to be in regular communication and provide you with updates on our progress as we go.

The Division has been in communication with the operators that have injection wells in these aquifers to see if they have any additional information that would support a determination that an aquifer, or part of an aquifer, meets the aquifer exemption criteria. Although the Division has yet to receive complete information supporting such a determination, the Division believes it is likely that it will be receiving such information for at least one of the 11 aquifers. If information is in fact presented that the Division and State Water Board agree would support a determination that an aquifer, or part of an aquifer, meets the criteria for exemption, the Division will conduct a public process, including a joint hearing with the State Water Board. It will then submit its final determination to U.S. EPA.

Likewise, if it becomes clear that operators cannot provide information that supports a determination that an aquifer meets the criteria for exemption, the Division will deem its evaluation complete for that aquifer. At that point, the Division will issue public notice proposing a determination that the aquifer fails to meet the criteria for exemption, and allow for public comment on that proposed determination. After completing the public participation process, the Division will submit its final determination to the U.S. EPA and request that it take appropriate action as to the exempt status of that aquifer.

2. <u>Plan and Timeframes for Addressing the Closure of Injection Wells for Which</u>
<u>There Is Insufficient Evidence That the Receiving Aquifer Meets the Criteria for an</u>
Aquifer Exemption

Under the plain language of our emergency regulations and proposed permanent regulations, improper injection activity must end by the relevant deadline agreed to by our respective agencies unless the activity is within a duly-approved aquifer exemption. We fully intend to adhere to the timeframes created by these regulations. Where no exemption is obtained going forward, either because exemption criteria are not met, or because the submittal of relevant data did not occur in time for any of the

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three involved agencies to reasonably act, such injection must end until an appropriate exemption is obtained. (Cal. Code Regs., Tit. 14, §§ 1760.1, 1779.1.)

If an affected operator fails to obtain an aquifer exemption by the relevant time, the operator would be in violation of the regulations, and be subject to a notice of violation and order to comply, as warranted.

Of course, injection wells can be, and have been, shut in prior to the applicable deadline under our regulations. As you know, we have been focusing our energies on identifying wells in proximity to waters of beneficial use before widening our review to other wells, and have obtained the shut in of 23 wells to date, either by order or by agreement with the operator. We are continuing to review wells in potential proximity to beneficial uses and will obtain permit relinquishments or issue shut-in orders as warranted.

3. Detailed Plan for Class II Program Improvements

The Division's current plan to address UIC Program improvements, including actions taken to date, a project by project review, rulemaking, training, monitoring and compliance and other activities is set forth in Attachment 2 to this letter, *Plan for Class II Improvements*.

4. Public Participation in Aguifer Exemption Process

Though not explicitly required at this juncture, in Attachment 3 to this letter, *Public Participation Process For Aquifer Exemption Proposals*, we generally describe for you our intended course of action for providing interested members of the public with notice of, and an opportunity to comment upon, our intention to recommend an exemption or state that exemption criteria have been met in a given case.

5. Other Matters

In our discussions, we agreed to a "soft" or "target" deadline of July 15 for the State to submit to you all applications for aquifer exemptions for wells scheduled to be shut in by October 15, 2015. As we recently discussed with you, to date we have not received adequate data to prepare an aquifer exemption application for the aquifers associated with this deadline.

Once we finish our work with those operators who submit packages, the packages will be circulated to the State Water Board and other interested administration officials. If there is agreement that an aquifer exemption application should go forward, the application will be scheduled for a 30 day notice and public comment period before it is finally sent to your agency for a final determination.

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As we recently confirmed to you, we have made it clear to the operators in workshops and in our regulations that (1) the earlier their data packages get to us, the more likely they will be to obtain a final determination from US EPA prior to any deadline to shut in certain classes of wells, and (2) that where no exemption is obtained by the deadline, operations must be shut in.

We trust you will contact us with any questions or concerns, and we look forward to our further discussions of the process as we work together to improve California's Class II program.

Sincerely,

Sincerely,

Steve Bohlen
State Oil and Gas Supervisor

Division of Oil, Gas and Geothermal

Resources

Jonathan Bishop

Chief Deputy Director

State Water Resources Control Board

Attachments

cc: Cliff Rechtschaffen, Senior Advisor, Governor's Office John Laird, Secretary, California Natural Resources Agency Matthew Rodriquez, Secretary, California Environmental Protection Agency David Bunn, Director, California Department of Conservation